



Launch Mission Execution Forecast

Mission: Falcon 9 StarlinkV1.0 L-16

Issued: 19 Jan 2021 / 1030L (1530Z)

Valid: 20 Jan 2021 / 0757 – 0808L (1257 – 1308Z)



Forecast Discussion: High pressure will continue to dominate the area, bringing pleasant days along the Space Coast for the first half of the week. Winds will continue to be light on Wednesday, shifting to the northwest, and upper-level winds begin to increase slightly as the jet dips further into the southeastern states. Moisture slightly increases over the Spaceport Wednesday morning, increasing the potential for low-topped cumulus clouds to develop. This will cause the primary concern to be the Cumulus Cloud Rule for a Wednesday launch attempt.

On Thursday, a frontal system will spread across the Eastern Seaboard, draping a front just to our east. This will bring in a few mid-level clouds as the high center is nudged south of the Spaceport. The primary weather concern is the Thick Cloud Layer Rule with these mid-level clouds associated with the frontal boundary.

Launch Day	Probability of Violating Weather Constraints					
	10%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear: Low
	Temp/Humidity: 58°F / 65%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
24-Hour Delay	Liftoff Winds (200'): 330° 10-15 mph	Cumulus	Few	3,000	4,500	Solar Activity: Low
	Probability of Violating Weather Constraints					
	20%	Primary Concerns: Thick Cloud Layer Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear: Moderate
	Temp/Humidity: 60°F / 70%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
	Liftoff Winds (200'): 310° 5-10 mph	Altostratus	Scattered	10,000	12,000	Solar Activity: Low
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.						
Next Forecast Will Be Issued		As needed				